

What is claimed is:

1. An autonomous response method, comprising:

autonomously updating a statement-response database; and

5 autonomously generating a natural language response to a received natural language input, wherein said generating a response comprises following a conversation strategy, choosing at least one context element from a context database and searching said updated statement-response database.

10 2. The method of claim 1 in which said autonomously updating comprises:

autonomously downloading publication content that matches at least one search criteria from an online publication formatted to be in human readable form;

converting said downloaded publication content into at least one entry suitable for use in said statement-response database ; and,

15 storing said at least one entry in said statement-response database.

3. The method of claim 1 in which said autonomously updating comprises:

autonomously acquiring an information stream from an audio-visual program presented in human accessible form, wherein said program matches at least one program search criteria;

20 transforming said information stream into at least one entry suitable for use in said statement-response database; and,

storing said at least one entry in said statement-response database.

25 4. The method of claim 1, in which said statement-response database includes at least one ranked-list of response entries appropriate to a statement.

5. The method of claim 1, in which said statement-response database includes at least one ranked-list of response entries related to prior conversations with a specific user.

6. The method of claim 1, in which said generating a response to a natural language query further comprises:

receiving said query as an electronic character stream;

parsing said query into a statement;

5 generating a plurality of candidate responses appropriate to said statement by searching said statement-response database;

choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context database;

outputting said best response as an electronic character stream.

10

7. The method of claim 1, in which said generating a response to a natural language query further comprises:

receiving an input audio signal corresponding to a human voice representation of said query;

15

converting said input audio signal into a query represented by an electronic character stream;

parsing said query into a statement;

generating a plurality of candidate responses appropriate to said statement by searching said statement-response database;

20

choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context database;

generating an electronic character stream representing a natural language version of said best response; and,

25

converting said electronic character stream into a synthetic speech signal corresponding to an audible version of said best response.

30

8. The method of claim 1, in which said context database includes a context element chosen from the group consisting of a date, a time, a temperature, a weather condition, a stock market index, an event result, a poll, an opinion survey, a transpired time of current conversation, a transpired number of responses and an identity of a current enquirer.

9. The method of claim 1, in which said conversation strategy comprises:

negotiating an identity of a current enquirer;  
negotiating a meaning of a current query; and,  
negotiating a conclusion to a current conversation.

5

10. The method of claim 1, in which said conversation strategy comprises:

scoring said query by assessing the level of language use in said query input to provide a metric of query sophistication;

generating at least two candidate responses appropriate to said query;

10

scoring said at least two candidate responses by assessing the level of language use in said candidate responses to provide a metric of response sophistication for each candidate response;

choosing said candidate response having said metric of response sophistication that most closely matches said metric of query sophistication.

15

11. An autonomous response apparatus, comprising:

a processor capable of:

autonomously updating a statement-response database; and

20

autonomously generating a natural language response to a received natural language input, wherein said generating a response comprises following a conversation strategy, choosing at least one context element from a context database and searching said updated statement-response database.

12. The apparatus of claim 11 in which said processor is further capable of :

25

autonomously downloading publication content that matches at least one search criteria from an online publication formatted to be in human readable form;

converting said downloaded publication content into at least one entry suitable for use in said statement-response database ; and,

storing said at least one entry in said statement-response database.

30

13. The apparatus of claim 11 in which said processor is further capable of autonomously updating, comprising:

5 autonomously acquiring an information stream from an audio-visual program presented in human accessible form, wherein said program matches at least one program search criteria;

transforming said information stream into at least one entry suitable for use in said statement-response database; and,

storing said at least one entry in said statement-response database.

10 14. The apparatus of claim 11, in which said statement-response database includes at least one ranked-list of response entries appropriate to a statement.

15 15. The apparatus of claim 11, in which said statement-response database includes at least one ranked-list of response entries related to prior conversations with a specific user.

16. The apparatus of claim 11, in which said processor is further capable of generating a response to a natural language query comprising:

receiving said query as an electronic character stream;

parsing said query into a statement;

20 generating a plurality of candidate responses appropriate to said statement by searching said statement-response database;

choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context database;

outputting said best response as an electronic character stream.

25 17. The apparatus of claim 11, in which said processor is capable of generating a response to a natural language query further comprising:

receiving an input audio signal corresponding to a human voice representation of said query;

30 converting said input audio signal into a query represented by an electronic character stream;

30 parsing said query into a statement;

5 generating a plurality of candidate responses appropriate to said statement by searching said statement-response database;

10 choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context database;

15 generating an electronic character stream representing a natural language version of said best response; and,

20 converting said electronic character stream into a synthetic speech signal corresponding to an audible version of said best response.

10

18. The apparatus of claim 11, in which said context database includes a context element chosen from the group consisting of a date, a time, a temperature, a weather condition, a stock market index, an event result, a poll, an opinion survey, a transpired time of current conversation, a transpired number of responses and an identity of a current enquirer.

15

19. The apparatus of claim 11, in which said processor is further capable of a conversation strategy comprising:

20 negotiating an identity of a current enquirer;

negotiating a meaning of a current query; and,

negotiating a conclusion to a current conversation.

20

25. The apparatus of claim 11, in which said processor is further capable of a conversation strategy comprising:

20 scoring said query by assessing the level of language use in said query input to provide a metric of query sophistication;

25 generating at least two candidate responses appropriate to said query;

30 scoring said at least two candidate responses by assessing the level of language use in said candidate responses to provide a metric of response sophistication for each candidate response;

30

choosing said candidate response having said metric of response sophistication that most closely matches said metric of query sophistication.